E/CONF.39/D/111
SUMMARY
12 Nov.1962
ENGLISH
ORIGINAL : RUSSIAN

UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

SUMMARY

Agenda Item: D.3.3

U.S.S.R.

STANDARDIZATION AS A MEANS OF ACHIEVEMENT OF SCIENTIFIC, TECHNICAL AND ECONOMIC PROGRESS AND THE APPLICATION OF ADVANCED EXPERIENCE IN UNDERDEVELOPED COUNTRIES

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Standardization as a Means of Achievement of Scientific, Technical and Economic Progress and the Application of Advanced Experience in Underdeveloped Countries.

by

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SUMMARY

Standardization and normalization are an indispensable condition for the development of modern industry and enhancement its organizational and technical level, because standards make provision for the latest achievements in science and technology. Besides, the rational uniformity, which is introduced by the standards, provides for a possibility of introducing the highest form of industrial organization - mass line production.

The inculcation of standards leads to considereble economy in social labour, as provision is made by the standards for the most advantageous form, weight, size of products, the manufacturing of which takes less time, materials, resources, etc.

Standardization exerts a substantial influence on the development of technical progress, as standards establish rational series of technical characteristics of machines, equipment and instruments as well as their assemblies and details, such standards determine progressive assortment of goods and raw materials.

Standardization and normalization are the means of speeding-up the development and mastering the production of new goods and reduction of the preparatory cycle for their production, since standards introduce, the necessary uniformity, regulate the characteristics of components used, thus considerably simplifying the process of preparing the production.

For those countries, where production is organized for the first time, the advantage of standardization, consisting of the fact that, side by side with the normalization, it is the most important condition of a progressive production organization, i.e., the base of a specialized mass production, assumes a particular importance, because it is not necessary for these countries to search for the ways of organization of such a production. They can adopt methods of other countries, technically and economically more developed. These countries also need not work out standards themselves. They can make use of the available national or international standards, tested in practice.

Since standards reflect the latest achievements of science and engineering, gained by the industrially and economically most developed countries, their inculcation in the production of this or other country means an adoption of advanced experience, attained in the most developed countries. This, standards are powerful means of sharing the most valuable experience acquired by those countries in the course of many years.

Standardization opens unbounded potentialities in the sphere of industrialization of national economy of the underdeveloped countries. Lately many new sovereign states have appeared in the world, which took the road of independent economic development. These are countries, which industrially and

economically are as yet insufficiently developed. But all of them use their independence for independent economic development, as only in this way these countries can achieve scientific-technical and economic progress and gradually provide higher living standards of their population. The International Standardization Organization (ISO) and the national standards-making organisations can render essential help to these countries in organising their standardization work and, therefore, in altaining scientific technical and economic progress.

Standardization is based on the advanced experience of firms and enterprises, the results of scientific researches and experiments, the analysis of statistical data on exploitation of goods. In our age, when it is impossible to develop the country's economy on the whole, i.e., organize mass industrial production, develop agriculture, speed up construction without the single standards, the standardization is necessary in any country. Many countries of the world have their own national standardization organizations, which being members of ISO are conducting wide and useful activity both for the elaboration of their own national standards and the inculcation of international standards in the economy of their countries.

In the Soviet Union the work on standardization is considered to be an important government measure and a part of the general plan for the national economy development.

The Soviet state standards are obligatory for application throughout the territory of the USSR and are the State law in production. The high level of development of the standardization in the USSR has made in possible to apply standards within a number of branches of industry, to 80 to 90 per cent of the goods output, as a result of which many kinds of newest machines, equipment and instruments, metals, mineral fuels, oil products, round timber, sawn timber and different kinds of raw materials for the manufacturing of various products are produced in the USSR in accordance with the state standards.

Some 600 scientific research and design institutes, offices, laboratories, enterprises, economic and other Soviet organizations are drawn into work of elaborating standards. While projects of the standards are worked out, all of the interested organizations and enterprises representing the production and consumption take part in discussing them.

At present more than 8.000 State standards are functioning in the Soviet Union, creating the most rational amount of type sizes, saving materials and solving a number of problems related to the inculcation of the latest achievements in science and technology, and taking into account of industry's advanced experience.

The whole system of standardization in the Soviet Union is based on the application of international metric system of measures. The successful introduction of this system in our country in the course of a short period of time has been accomplished as a result of a number of organizational and technical measures taken. The system of measuring units adopted in the USSR is in complete accordance with the latest achievements of world science and technology and decisions of the international

metrological organizations.

The International Standardisation Organization, which is conducting extensive work on elaborating international recomendations, can render a substantial help in achieving scientific, technical and economic progress in the underdeveloped countries. The main significance of the ISO activity consists in that the recomendations worked out by it and adopted by its member - countries should be introduced in the national standards and the economy of individual countries.

The technical cooperation assumes more and more international character; and the national norms in science and technology are gradually becoming international, their fusion being due to the standardization, the importance of which will be steadily increasing.

It is desirable that the Governments of the countries, represented at this conference, should pay attention to the problem of the standardization, one of the powerful means of the economic development of the underdeveloped countries and the rise of the living standards of their peoples.

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